

Proline Promag P 100

Elektromagnetische flowmeter

De flowmeter voor hoge mediumtemperaturen met een ultracompacte transmitter



Meer informatie en actuele prijzen:

www.be.endress.com/5P1B

Voordelen:

- Veelzijdige applicaties – grote selectie aan materialen die in contact komen met het medium
- Energiebesparende flowmeting – geen drukverlies door vernauwing van de doorsnede
- Onderhoudsvrij – geen bewegende onderdelen
- Ruimtebesparende transmitter – volledige functionaliteit in een zeer kleine ruimte
- Tijdbesparende lokale bediening zonder aanvullende software en hardware – geïntegreerde webserver
- Geïntegreerde verificatie – Heartbeat-technologie

Overzicht specificaties

- **Max. measurement error** Volume flow (standard): $\pm 0.5\%$ o.r. ± 1 mm/s (0.04 in/s) Volume flow (option): $\pm 0.2\%$ o.r. ± 2 mm/s (0.08 in/s)
- **Measuring range** 4 dm³/min to 9600 m³/h (1 to 44 000 gal/min)
- **Medium temperature range** Liner material PFA: -20 to $+150$ °C (-4 to $+302$ °F) Liner material PFA high - temperature: -20 to $+180$ °C (-4 to $+356$ °F) Liner material PTFE: -40 to $+130$ °C (-40 to $+266$ °F)
- **Max. process pressure** PN 40, Class 300, 20K
- **Wetted materials** Liner: PFA, PTFE Electrodes: 1.4435 (316L); Alloy C22, 2.4602 (UNS N06022); Tantalum; Platinum; Titanium Duplex 1.4462 (UNS S31803)

Toepassingsgebied: De Promag P is bedoeld voor chemische en proces toepassingen met corrosieve vloeistoffen en hoge

mediumtemperaturen. De ultracompacte transmitter levert maximale prestaties met de kleinst mogelijke voetafdruk en zorgt voor naadloze systeemintegratie, waardoor de Promag P 100 de voorkeur heeft van skidbouwers, machinefabrieken en systeemintegrators. Heartbeat Technology waarborgt de compatibiliteit en de procesveiligheid.

Kenmerken en specificaties

Liquids

Meetprincipe

Electromagnetic

Product headline

The flowmeter for highest medium temperatures with an ultra-compact transmitter.

Dedicated to chemical and process applications with corrosive liquids and high medium temperatures.

Sensor features

Diverse applications – wide variety of wetted materials. Energy - saving flow measurement – no pressure loss due to cross section constriction.

Maintenance - free – no moving parts.

Nominal diameter: max. DN 600 (24"). All common Ex approvals. Liner made of PTFE or PFA.

Transmitter features

Space - saving transmitter – full functionality on the smallest footprint.

Time - saving local operation without additional software and hardware – integrated web server. Integrated verification – Heartbeat Technology.

Robust, ultra-compact transmitter housing. Local display available.

Nominal diameter range

DN 15 to 600 (½ to 24")

Liquids

Wetted materials

Liner: PFA, PTFE

Electrodes: 1.4435 (316L); Alloy C22, 2.4602 (UNS N06022);
Tantalum; Platinum; Titanium

Duplex 1.4462 (UNS S31803)

Measured variables

Volume flow, conductivity, mass flow, corrected volume flow, corrected conductivity

Max. measurement error

Volume flow (standard): $\pm 0.5\%$ o.r. ± 1 mm/s (0.04 in/s)

Volume flow (option): $\pm 0.2\%$ o.r. ± 2 mm/s (0.08 in/s)

Measuring range

4 dm³/min to 9600 m³/h (1 to 44 000 gal/min)

Max. process pressure

PN 40, Class 300, 20K

Medium temperature range

Liner material PFA: -20 to $+150$ °C (-4 to $+302$ °F)

Liner material PFA high - temperature: -20 to $+180$ °C (-4 to $+356$ °F)

Liner material PTFE: -40 to $+130$ °C (-40 to $+266$ °F)

Ambient temperature range

Flange material carbon steel: -10 to $+60$ °C ($+14$ to $+140$ °F)

Flange material stainless steel: -40 to $+60$ °C (-40 to $+140$ °F)

Sensor housing material

DN 15 to 300 ($\frac{1}{2}$ to 12"): AlSi10Mg, coated

DN 350 to 600 (14 to 24"): Carbon steel with protective varnish

Transmitter housing material

AlSi10Mg, coated

Liquids

Degree of protection

IP66/67, type 4X enclosure

Display/Operation

4 - line backlit display available (no local operation)
Configuration via web browser and operating tools possible

Outputs

4 - 20 mA HART (active)
Pulse/frequency/switch output (passive)

Inputs

None

Digital communication

HART, PROFIBUS DP, Modbus RS485, EtherNet/IP, PROFINET

Power supply

DC 20 to 30 V

Hazardous area approvals

ATEX, IECEx, cCSAus, INMETRO

Other approvals and certificates**Product safety**

CE, C-Tick

Metrological approvals and certificates

Calibration performed on accredited calibration facilities (acc. to ISO/IEC 17025)

Heartbeat Technology complies with the requirements for measurement traceability according to ISO 9001:2015 – Section 7.1.5.2 a (TÜV SÜD attestation)

Marine approvals and certificates

LR approval, DNV GL approval, ABS approval, BV approval

Liquids

Pressure approvals and certificates

PED, CRN

Material certificates

3.1 material

Hygienic approvals and certificates

Drinking water approval: ACS, NSF 61, WRAS

Meer informatie www.be.endress.com/5P1B